

Amendments to the Claims

Claims 1 - 6 (canceled)

1 Claim 7 (original): A computer program product for improving performance and resource
2 utilization of software applications that interact with a back-end data source to update information
3 stored therein, the computer program product embodied on one or more computer-readable media
4 and comprising:

5 computer-readable program code means for storing one or more objects in a cache for
6 responding to update requests against the objects, wherein (1) a set of input properties is stored with
7 or associated with each stored object and (2) update logic specifying how to update each of the
8 stored objects is stored with or associated with the stored object or a group of stored objects;

9 computer-readable program code means for receiving update requests against one or more of
10 the objects;

11 computer-readable program code means for determining an update mode to use for a
12 selected update request, responsive to the computer-readable program code means for receiving;

13 computer-readable program code means for immediately processing the selected update
14 request if the determined update mode is not a delayed update mode; and

15 computer-readable program code means for delaying processing of the selected update
16 request otherwise.

1 Claim 8 (original): The computer program product according to Claim 7, wherein the computer-
2 readable program code means for delaying processing further comprises:

Serial No. 09/611,157

-6-

Docket RSW9-2000-0034-US1

3 computer-readable program code means for queuing the selected update request, along with
4 the input properties and values thereof which are to be used for performing the selected update
5 request, as a queued update request on an update queue;

6 computer-readable program code means for detecting a triggering event for performing the
7 delayed processing of the queued update requests; and

8 computer-readable program code means for performing, responsive to the computer-readable
9 program code means for detecting, the queued update requests.

1 Claim 9 (original): The computer program product according to Claim 8, wherein the computer-
2 readable program code means for performing further comprises:

3 computer-readable program code means for setting the input properties of a selected object
4 against which the queued update request is to be performed using the queued input property values;
5 and

6 computer-readable program code means for executing the update logic stored with or
7 associated with the selected object.

1 Claim 10 (original): The computer program product according to Claim 8, wherein the triggering
2 event comprises reaching a particular count of queued update requests for a selected object.

1 Claim 11 (original): The computer program product according to Claim 8, wherein the triggering
2 event comprises reaching a particular time of day.

1 Claim 12 (currently amended): The computer program product according to Claim 8, wherein the
2 ~~update policy~~ triggering event comprises information about an associated object which is used for
3 responding to read requests.

1 Claim 13 (original): The computer program product according to Claim 8, wherein a separate
2 update queue is created for each of one or more back-end data sources to be accessed during
3 operation of the computer-readable program code means for performing.

1 Claim 14 (original): The computer program product according to Claim 7, wherein the computer-
2 readable program code means for determining further comprises computer-readable program code
3 means for selecting the delayed update mode based upon a time of day when the selected update
4 request is received.

1 Claim 15 (original): The computer program product according to Claim 7, wherein the computer-
2 readable program code means for determining further comprises computer-readable program code
3 means for selecting the delayed update mode based upon a classification of a user making the
4 selected update request.

1 Claim 16 (original): The computer program product according to Claim 8, further comprising:
2 computer-readable program code means for connecting to the back-end data source prior to
3 operation of the computer-readable program code means for performing; and
4 computer-readable program code means for disconnecting from the back-end data source

Serial No. 09/611,157

-8-

Docket RSW9-2000-0034-US1

5 after operation of the computer-readable program code means for performing.

Claims 17 - 22 (canceled)

1 Claim 23 (original): A system for improving performance and resource utilization of software
2 applications that interact with a back-end data source to update information stored therein,
3 comprising:

4 means for storing one or more objects in a cache for responding to update requests against
5 the objects, wherein (1) a set of input properties is stored with or associated with each stored object
6 and (2) update logic specifying how to update each of the stored objects is stored with or associated
7 with the stored object or a group of stored objects;

8 means for receiving update requests against one or more of the objects;

9 means for determining an update mode to use for a selected update request, responsive to the
10 means for receiving;

11 means for immediately processing the selected update request if the determined update mode
12 is not a delayed update mode; and

13 means for delaying processing of the selected update request otherwise.

1 Claim 24 (original): The system according to Claim 23, wherein the means for delaying processing
2 further comprises:

3 means for queuing the selected update request, along with the input properties and values
4 thereof which are to be used for performing the selected update request, as a queued update request

Serial No. 09/611,157

-9-

Docket RSW9-2000-0034-US1

5 on an update queue;
6 means for detecting a triggering event for performing the delayed processing of the queued
7 update requests; and
8 means for performing, responsive to the means for detecting, the queued update requests.

1 Claim 25 (original): The system according to Claim 24, wherein the means for performing further
2 comprises:

3 means for setting the input properties of a selected object against which the queued update
4 request is to be performed using the queued input property values; and
5 means for executing the update logic stored with or associated with the selected object.

1 Claim 26 (original): The system according to Claim 24, wherein the triggering event comprises
2 reaching a particular count of queued update requests for a selected object.

1 Claim 27 (original): The system according to Claim 24, wherein the triggering event comprises
2 reaching a particular time of day.

1 Claim 28 (currently amended): The system according to Claim 24, wherein the ~~update policy~~
2 triggering event comprises information about an associated object which is used for responding to
3 read requests.

1 Claim 29 (original): The system according to Claim 24, wherein a separate update queue is created

Serial No. 09/611,157

-10-

Docket RSW9-2000-0034-US1

2 for each of one or more back-end data sources to be accessed during operation of the means for
3 performing.

1 Claim 30 (original): The system according to Claim 23, wherein the means for determining further
2 comprises means for selecting the delayed update mode based upon a time of day when the selected
3 update request is received.

1 Claim 31 (original): The system according to Claim 23, wherein the means for determining further
2 comprises means for selecting the delayed update mode based upon a classification of a user making
3 the selected update request.

1 Claim 32 (original): The system according to Claim 24, further comprising:
2 means for connecting to the back-end data source prior to operation of the means for
3 performing; and
4 means for disconnecting from the back-end data source after operation of the means for
5 performing.

Claims 33 - 38 (canceled)

1 Claim 39 (original): A method for improving performance and resource utilization of software
2 applications that interact with a back-end data source to update information stored therein,
3 comprising the steps of:

Serial No. 09/611,157

-11-

Docket RSW9-2000-0034-US1

4 storing one or more objects in a cache for responding to update requests against the objects,
5 wherein (1) a set of input properties is stored with or associated with each stored object and (2)
6 update logic specifying how to update each of the stored objects is stored with or associated with the
7 stored object or a group of stored objects;

8 receiving update requests against one or more of the objects;

9 determining an update mode to use for a selected update request, responsive to the receiving
10 step;

11 immediately processing the selected update request if the determined update mode is not a
12 delayed update mode; and

13 delaying processing of the selected update request otherwise.

1 Claim 40 (original): The method according to Claim 39, wherein the step of delaying processing
2 further comprises the steps of:

3 queuing the selected update request, along with the input properties and values thereof which
4 are to be used for performing the selected update request, as a queued update request on an update
5 queue;

6 detecting a triggering event for performing the delayed processing of the queued update
7 requests; and

8 performing, responsive to the detecting step, the queued update requests.

1 Claim 41 (original): The method according to Claim 40, wherein the performing step further
2 comprises the steps of:

Serial No. 09/611,157

-12-

Docket RSW9-2000-0034-US1

3 setting the input properties of a selected object against which the queued update request is to
4 be performed using the queued input property values; and
5 executing the update logic stored with or associated with the selected object.

1 Claim 42 (original): The method according to Claim 40, wherein the triggering event comprises
2 reaching a particular count of queued update requests for a selected object.

1 Claim 43 (original): The method according to Claim 40, wherein the triggering event comprises
2 reaching a particular time of day.

1 Claim 44 (currently amended): The method according to Claim 40, wherein the update policy
2 triggering event comprises information about an associated object which is used for responding to
3 read requests.

1 Claim 45 (original): The method according to Claim 40, wherein a separate update queue is created
2 for each of one or more back-end data sources to be accessed during operation of the step of
3 performing.

1 Claim 46 (original): The method according to Claim 39, wherein the determining step further
2 comprises the step of selecting the delayed update mode based upon a time of day when the selected
3 update request is received.

1 Claim 47 (original): The method according to Claim 39, wherein the determining step further
2 comprises the step of selecting the delayed update mode based upon a classification of a user
3 making the selected update request.

1 Claim 48 (original): The method according to Claim 40, further comprising the steps of:
2 connecting to the back-end data source prior to operation of the performing step; and
3 disconnecting from the back-end data source after operation of the performing step.